NetApp®

AFF A200 Tech Specs

NAS Scale-out	2-24 nodes (12 HA pairs)
Maximum SSD	1728
Maximum Raw Capacity	48.3PB/42.9PiB
Effective Capacity[1]	193.2PB/171.6PiB
Maximum Memory	768GB
SAN Scale-out	2-12 nodes (6 HA pairs)
Maximum SSD	864
Maximum Raw Capacity	24.2PB/21.4PiB
Effective Capacity[1]	96.8PB / 85.6PiB
Maximum Memory	384GB
Cluster Interconnect	4x 10GbE

[1] Effective capacity based on 5:1 storage efficiency ratios with the maximum number of SSDs installed. Actual ratio is up to 10:1 or higher depending on workloads and use cases.

Per HA Pair Specifications (active-active dual controller)	
Maximum SSD	144
Maximum Raw Capacity	2.2PB/2.0PiB
Effective Capacity[1]	8.8PB/7.8PiB
Controller Chassis Form Factor	2U chassis with two HA controllers and 24 SSD slots
Memory	64GB
NVRAM/NVMEM	8GB
PCIe Expansion Slots	n/a
Onboard I/O: 40GbE or 10GbE	n/a
Onboard I/O: UTA2 (16Gb FC, 10GbE/ FCoE)	8
Onboard I/O: 10GbE	4
Onboard I/O: 10Gbase-T	n/a
Onboard I/O: 12Gb SAS	4
Storage Networking Supported	FC; FCoE; iSCSI; NFS; pNFS; CIFS/SMB
OS Version	ONTAP 9.1 RC2 or later
High-Availability Features	SAS in-band management over SAS connections; Ethernet-based service processor and ONTAP management interface; redundant hot-swappable controllers, cooling fans, and power supplies
Supported Configurations ONTAP 9.1	Cluster Configurations • Two-node switchless or switched cluster • Clusters of HA pairs
Supported Internal SSDs	30.5TB, 15.3TB, 7.6TB, 3.8TB, and 960GB 3.8TB and 800GB self-encrypting[2]

Supported Storage Shelves and SSDs	Configured with new systems:
	• Storage shelf: DS224C; 2U 24 drive, 12Gbps SAS
	  - SSDs: 15.3TB, 7.6TB, 3.8TB, and 960GB
	  - Self-encrypting[2] SSDs: 3.8TB (all system models) and
	    800GB (AFF A300 and AFF A200 only)
	Supported when expanding system capacity or adding storage from other AFF systems:
	• Storage shelf: DS224C; 2U 24 drive, 12Gbps SAS
	  - SSDs: 30.5TB, 15.3TB, 7.6TB, 3.8TB, and 960GB
	  - Self-encrypting SSDs: 3.8TB (all system models) and 800GB
	• Storage shelf: DS2246; 2U 24 drive, 6Gbps SAS
	  - SSDs: 3.8TB, 1.6TB, 800GB, and 400GB
	  - Self-encrypting SSDs: 1.6TB and 800GB
	[2] Self-encrypting SSDs are AES-256, FIPS 140-2 compliant

Maximum RAID Group Sizes	RAID-TEC™ (triple parity RAID, supported with ONTAP 9.0 and later) SSD: 29 (26 data drives plus 3 parity drives) RAID 6 (RAID DP) SSD: 28 (26 data drives plus 2 parity drives) RAID 4 SSD: 14 (13 data drives plus 1 parity drive) RAID 6 + RAID 1 or RAID 4 + RAID 1 (SyncMirror®)
Host Operating Systems Supported	Windows® 2000, Windows Server® 2003, Windows Server 2008, Windows Server 2012, Windows Server 2016, Linux®, Oracle® Solaris, AIX, HP-UX, Mac® OS, VMware®, ESX®
Max. Number of LUNs	4096
Number of Supported SAN Hosts	512
FlexVol® volumes	Up to 1,000 per controller
Snapshot® Copies	Up to 255,000 per controller
Maximum Volume Size	100TiB
Maximum Aggregate Size	800TiB

Maximum port counts include both onboard and expansion card or module ports (per HA pair)	
FC target ports (32Gb autoranging)	n/a
FC target ports (16Gb autoranging)	8
FC target ports (8Gb or 4Gb)	8
FCoE target ports, UTA2	8
40GbE ports	n/a
10GbE ports	8
10Gbase-T ports (1GbE autoranging)	n/a
12Gb/6Gb SAS ports	4
FC initiator ports	8
System Environmental Specifications	
Thermal Rating (at 200VAC)	1,209 BTU/hr (typical) 1,676 BTU/hr (worst case) Dual-controller chassis with 24x 3.8TB SSD
Weight	60.8 lb (27.6 kg) Dual-controller chassis with 24x 3.8TB SSD
Height	2U
Width	19″ IEC rack-compliant (17.6″, 44.7 cm)
Depth	19″ (without cable management bracket)
Operating Temperature, Altitude, and Relative Humidity	5°C to 45°C (41°F to 113°F) at ≤3,048 m (≤10,000 ft) elevation; 8% to 90% relative humidity, noncondensing
Nonoperating Temperature and Relative Humidity	-40°C to 70°C (-40°F to 158°F) up to 12,192 m (40,000 ft) 10% to 95% relative humidity, noncondensing, in original container
Operating Acoustic Noise (at 23°C and at sea level)	• Declared sound power (LwAd) per ISO 9296: 6.9 Bel • Sound pressure (LpAm) (bystander positions): 51 dB Measured configured with 24x 3.8TB SSD
Compliance	RoHS-compliant
Safety/Emissions/ Immunity	Safety: EN 60950, CE, CSA 60950, UL 60950, CB IEC60950-1 (all national deviations), EN60825-1, IRAM, GOST-R, BSMI, SONCAP, NRCS LOA (South Africa) Emissions/Immunity: FCC Part 15 Class A, ICES-03, CE, KCC, VCCI, AS/NZS CISPR 22, EN55022, EN55024, EN61000-3-2, EN61000-3-3, SABS COC (South Africa), BSMI
NetApp Systems Cabinet	
Rack Space	42U
Dimensions (height/width/depth)	78.75″ (200 cm)/23.6″ (60 cm)/44.3″ (112.5 cm)
Minimum Cabinet Clearances for Airflow	10″ (25.4 cm) front and 12″ (30.5 cm) rear
Minimum Cabinet Clearances for Service	30″ (76.3 cm) front and rear, 12″ top
AC Power	200 to 240VAC
Current	30A Single Phase or 3-Phase
Weight (empty)	307 lbs (138 kg)
Features	Split rear door with cable egress opening, reversible front door (left or right handed)